Progress Energy

April 29, 2010

Ms. Jocelyn Boyd
Interim Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Ms. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of March 2010.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

March 2010

The following units had no off-line outages during the month of March:

Brunswick Unit 2
Harris Unit 1
Mayo Unit 1
Roxboro Unit 3
Roxboro Unit 4

March 2010

Brunswick Unit 1

Full Scheduled Outage

A. Duration: The unit was taken out of service at 0:02 on February 27, and remained offline for the remainder of the month. The unit was offline for 743 hours for the month of March.

B. Cause: Scheduled Refueling Outage

C. Explanation: The unit was taken out of service for a scheduled refueling outage. In addition to refueling, required maintenance and inspections are being carried out during this outage.

D. Corrective Action: Planned outage activities were in progress at the end of March.

March 2010

Robinson Unit 2

Full Forced Outage

A. Duration: The unit was taken out of service at 18:51 on March 28, and remained offline for the remainder of the month. The unit was offline for a duration of 77 hours and 9 minutes during the month of March.

B. Cause: Automatic Reactor Trip following fire associated with 4-kV power supply to non-vital bus 5.

C. Explanation: The initiating event was an electrical fault to ground at a cable conduit connection to 4-kV bus 5 that propagated to a second conduit at a 90-degree bend above the bus 5 switchgear in the turbine building. The tie breaker from 4-kV bus 4 to this bus did not open, resulting in a lowered voltage on the connected buses and causing lowered reactor coolant pump (RCP) flow in one of the RCS loops, which initiated the automatic scram.

D. Corrective Action: At the end of March, investigation was underway to determine the cause of the fire, assess damage, and begin repairs.

March 2010

Roxboro Unit 2

Full Scheduled Outage

A. Duration: The unit was taken out of service at 0:04 on March 20, and remained offline for the remainder of the month. The unit was offline for a duration of 287 hours and 56 minutes during the month of March.

B. Cause: Boiler Inspection and Turbine Outage

C. Explanation: The unit was taken out of service for a planned boiler inspection and turbine outage.

D. Corrective Action: Planned outage activities were in progress at the end of March.

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	975	MW	947	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	-2,429	MWH	7,234,811	MWH	2
Capacity Factor	0.00	%	87.19	%	
Equivalent Availability	0.00	%	86.97	%	
Output Factor	0.00	%	99.15	%	
Heat Rate	0	BTU/KWH	10,469	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	724,425	100.00	771,193	9.29	3
Partial Scheduled	0	0.00	44,792	0.54	4
Full Forced	0	0.00	249,696	3.01	5
Partial Forced	0	0.00	79,306	0.96	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	724,425		8,297,910		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	953	MW	928	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	698,355	MWH	6,999,948	MWH	2
Capacity Factor	98.63	%	86.08	%	
Equivalent Availability	99.16	%	85.12	%	
Output Factor	98.63	%	97.84	%	
Heat Rate	10,505	BTU/KWH	10,630	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	739,433	9.09	3
Partial Scheduled	5,937	0.84	51,561	0.63	4
Full Forced	0	0.00	232,840	2.86	5
Partial Forced	3,787	0.53	202,076	2.49	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	708,079		8,131,470		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	936	MW	909	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	695,980	MWH	7,414,671	MWH	2
Capacity Factor	100.08	%	93.12	%	
Equivalent Availability	100.00	%	91.64	%	
Output Factor	100.08	%	100.80	%	
Heat Rate	10,564	BTU/KWH	10,687	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	495,270	6.22	3
Partial Scheduled	0	0.00	51,582	0.65	4
Full Forced	0	0.00	105,870	1.33	5
Partial Forced	0	0.00	6,844	0.09	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	695,448		7,962,840		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	758	MW	722	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	507,069	MWH	6,412,998	MWH	2
Capacity Factor	90.03	%	101.40	%	
Equivalent Availability	89.62	%	97.76	%	
Output Factor	100.47	%	103.39	%	
Heat Rate	10,550	BTU/KWH	10,671	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	33,335	0.53	3
Partial Scheduled	0	0.00	8,880	0.14	4
Full Forced	58,480	10.38	90,524	1.43	5
Partial Forced	0	0.00	10,254	0.16	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	563,194		6,324,720		8

* See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	726	MW	738	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	425,209	MWH	4,521,240	MWH	2
Capacity Factor	78.83	%	69.93	%	
Equivalent Availability	99.94	%	95.13	%	
Output Factor	78.83	%	75.12	%	
Heat Rate	10,286	BTU/KWH	10,684	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	213,041	3.30	3
Partial Scheduled	0	0.00	45,453	0.70	4
Full Forced	0	0.00	19,329	0.30	5
Partial Forced	340	0.06	38,628	0.60	6
Economic Dispatch	113,869	21.11	1,627,685	25.18	7
Possible MWH	539,418		6,464,880		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	671	MW	664	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	283,362	MWH	4,275,473	MWH	2
Capacity Factor	56.84	%	73.48	%	
Equivalent Availability	61.24	%	85.39	%	
Output Factor	92.80	%	84.50	%	
Heat Rate	9,079	BTU/KWH	8,930	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	193,203	38.75	517,705	8.90	3
Partial Scheduled	56	0.01	40,480	0.70	4
Full Forced	0	0.00	219,953	3.78	5
Partial Forced	0	0.00	72,591	1.25	6
Economic Dispatch	21,932	4.40	692,349	11.90	7
Possible MWH	498,553		5,818,830		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	698	MW	696	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	410,239	MWH	3,910,705	MWH	2
Capacity Factor	79.10	%	64.17	%	
Equivalent Availability	99.91	%	93.05	%	
Output Factor	79.10	%	68.22	%	
Heat Rate	10,950	BTU/KWH	10,919	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	362,106	5.94	3
Partial Scheduled	0	0.00	4,379	0.07	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	473	0.09	56,600	0.93	6
Economic Dispatch	107,902	20.81	1,760,887	28.89	7
Possible MWH	518,614		6,094,770		8

* See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of March 2010		Twelve Month Summary		See Notes*
MDC	711	MW	701	MW	1
Period Hours	743	HOURS	8,760	HOURS	
Net Generation	351,016	MWH	4,436,566	MWH	2
Capacity Factor	66.45	%	72.23	%	
Equivalent Availability	94.29	%	93.61	%	
Output Factor	66.45	%	76.40	%	
Heat Rate	11,726	BTU/KWH	11,876	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	293,219	4.77	3
Partial Scheduled	13,798	2.61	38,512	0.63	4
Full Forced	0	0.00	5,596	0.09	5
Partial Forced	16,365	3.10	54,349	0.88	6
Economic Dispatch	147,094	27.84	1,314,305	21.40	7
Possible MWH	528,273		6,142,950		8

* See 'Notes for Fossil Units' filed with the January 2010 report.
** Gross of Power Agency

Run Date 4/14/2010

Plant	Unit	Current MW Rating	January 2009 - December 2009	March 2010	January 2010 - March 2010
Asheville	1	196	70.87	68.41	73.95
Asheville	2	187	59.45	70.64	72.75
Cape Fear	5	148	63.73	78.70	81.56
Cape Fear	6	175	62.21	71.30	79.73
Lee	1	80	50.63	60.48	77.14
Lee	2	80	41.80	46.64	62.75
Lee	3	257	58.82	67.41	77.84
Mayo	1	726	62.45	78.83	86.49
Robinson	1	179	61.18	47.53	74.32
Roxboro	1	374	79.40	93.79	85.85
Roxboro	2	671	73.67	56.84	79.10
Roxboro	3	698	62.76	79.10	79.58
Roxboro	4	711	71.40	66.45	79.39
Sutton	1	98	39.14	44.52	58.54
Sutton	2	107	44.65	54.80	61.78
Sutton	3	411	48.01	52.68	59.82
Weatherspoon	1	49	13.92	30.38	49.92
Weatherspoon	2	49	14.93	28.84	33.60
Weatherspoon	3	79	23.59	57.12	68.31
Fossil System Total		5,275	62.52	67.74	76.78
Brunswick	1	975	97.67	0.00	60.13
Brunswick	2	953	79.50	98.63	91.87
Harris	1	936	93.90	100.08	99.88
Robinson Nuclear	2	758	104.08	90.03	97.06
Nuclear System Total		3,622	93.18	70.56	86.48
Total System		8,897	74.79	68.89	80.73

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period March 1, 2010 through March 31, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to March 31, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	1,898,975 MWH
B. Total number of hours during SCPSC test period	B =	743 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D =	788,843 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 103.9%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2010 to March 31, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	724,425	0	0	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	0	288	0	58,480	
Reasonable coast down power reductions (MWH)	0	0	0	0	
Reasonable power ascension power reductions (MWH)	0	0	0	0	
Prudent NRC required testing outages (MWH)	0	5,650	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	724,425	5,938	0	58,480	
Total reasonable outage time exclusions [carry to Page 1, Line D]					788,843